



Michigan Refining Division

Marathon Petroleum Company LP

1300 South Fort Street
Detroit, MI 48217
Telephone 313/843-9100

VIA FEDERAL EXPRESS

April 4, 2012

Ms. Wilhemina McLemore, District Supervisor
Michigan Department of Environmental Quality
Air Quality Division
3058 W. Grand Boulevard
Suite 2300
Detroit, MI 48202

**Re: Continuous Emissions Monitoring System Reports for the First Quarter 2012;
Marathon Petroleum Company LP – Michigan Refining Division**

Dear Ms. McLemore:

This report contains information and data related to continuous emissions monitoring systems (CEMS) at Marathon Petroleum Company LP's (MPC's) Michigan Refining Division (MRD) for the first quarter 2012. These reports are submitted pursuant to the General Provisions of the federal New Source Performance Standards (40 CFR 60.7) and Rule 1170 of the Michigan Air Pollution Control Rules. In addition, this report contains information required by the first modification to the November 2005 First Revised NSR Consent Decree, United States of America et. al. v. Marathon Petroleum Company LLC (Civil Action No. 4:01CV-40119-PVG), lodged February 7, 2008 and entered on March 31, 2008. This report is divided into four attachments as follows:

Appendix A – CEMS downtime and excess emissions summary reports pursuant to 40 CFR 60.7(d) for all environmental analyzers at the Refinery. The CEMS did not exceed the 5% downtime limit. The SRU Thermal Oxidizer exceeded the 1% excess emission limit.

Appendix B - New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) data for seven streams: (1) Alky Spent Caustic H₂S, (2) CCR/SR Recycle H₂ H₂S, (3) DHT/Unifiner Recycle H₂ H₂S, (4) FCCU Disulfide off-gas H₂S, (5) CP Spent Caustic Drum Vent H₂S, (6) SR Aromatics Sump Vent H₂S, and (7) CCR Chlorsorb Vent SO₂. The Alky Spent Caustic H₂S samples were not collected in the first quarter due to an oversight.

The Refinery has five additional AMPs for which no data is being submitted: (1) The Crude Spent Caustic Drum was permanently shutdown, (2) The BT Recycle Hydrogen, which was part of the BT Platformer unit, was permanently shutdown in September 2005, (3) CCR Lockhopper Vent Gas which currently cannot physically be vented to the flare or fuel system, (4) Propylene Deethanizer off-gas, and (5) Alky Deethanizer off-gas were re-routed to a location that the refinery's fuel gas H₂S analyzer will receive the streams.

All AMPs were obtained in accordance with the NSPS General Provisions (40 CFR §60.13(i)).

Appendix C – Data from cylinder gas audits performed on CEMS located on the exhaust of the B&W Boiler, CCR Charge Heater, Crude and Vacuum Heaters, East Plant H2S, West Plant H2S, FCC Charge Heater, FCCU Regenerator, SRU Thermal Oxidizer, and the Zurn Boiler.

Please note, under the refinery's Title V permit in Table E-1.3, Section III.A.1 it indicates that quarterly cylinder gas audits of the FCCU opacity monitor are required; however, a quarterly cylinder gas audit program does not exist for this type of analyzer. The refinery is maintaining the analyzer according to the PTI 28-02A and completing a yearly audit of the analyzer. The refinery has requested a wording modification in the Title V renewal.

Appendix D – Excess Emission Report for the SRU Thermal Oxidizer SO2 exceedence of 1% excess emissions.

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information in Appendices A through D of this submittal is, to the best of my knowledge and belief, true, accurate, and complete. Please contact Tabetha Daum at (313) 297-4701 if you have any questions concerning this submittal.

Sincerely,

Marathon Petroleum Company LP

By: MPC Investment LLC, General Partner


Mr. C.T. Case, Deputy Assistant Secretary

Attachments

cc: Technical Programs Unit - MDEQ: AQD – c/o Karen Kajiya-Mills – *Federal Express*

Chief, Environmental Enforcement Section, Environment and Natural Resources Division, U.S. DOJ - *Federal Express*

U.S. EPA, Director of Air Enforcement Division c/o Matrix Environmental and Geotechnical-- *Federal Express*

Air and Radiation Division, U.S. EPA Region 5 – *Federal Express*

Office of Regional Counsel, U.S. EPA Region 5 – *Federal Express*

Appendix A

CEMS Downtime and Excess Emissions Summary Reports

Excess Emission and CEM Reporting Form

Pollutant: SO₂ (NO_x) CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 0.20 lbs/MMBTU

Emission Unit: BW Boiler

Average Time: daily average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>5.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.23</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm

Emission Unit: BW Boiler (CO)

Average Time: daily average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>5.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>5.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.23</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: BW Boiler (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary																				
<p>1. Duration of Excess Emissions</p> <table> <tr> <td>A. Startup/Shutdown</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Control Equipment</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. Process Problems</td><td><u>0.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>0.00</u> hrs</p> <p>3. Percent of Total Excess Emissions <u>0.00</u> %</p>	A. Startup/Shutdown	<u>0.00</u> hrs	B. Control Equipment	<u>0.00</u> hrs	C. Process Problems	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs	<p>1. Duration of CEM Downtime During Source Operation</p> <table> <tr> <td>A. Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>B. Non- Monitor Malfunction</td><td><u>0.00</u> hrs</td></tr> <tr> <td>C. QA Calibration</td><td><u>5.00</u> hrs</td></tr> <tr> <td>D. Other Known Causes</td><td><u>0.00</u> hrs</td></tr> <tr> <td>E. Unknown Causes</td><td><u>0.00</u> hrs</td></tr> </table> <p>2. Total Duration <u>5.00</u> hrs</p> <p>3. Percent of Total CEM Downtime <u>0.23</u> %</p>	A. Monitor Malfunction	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs	C. QA Calibration	<u>5.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
A. Startup/Shutdown	<u>0.00</u> hrs																				
B. Control Equipment	<u>0.00</u> hrs																				
C. Process Problems	<u>0.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				
A. Monitor Malfunction	<u>0.00</u> hrs																				
B. Non- Monitor Malfunction	<u>0.00</u> hrs																				
C. QA Calibration	<u>5.00</u> hrs																				
D. Other Known Causes	<u>0.00</u> hrs																				
E. Unknown Causes	<u>0.00</u> hrs																				

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 80 ppm

Average Time: 7 day average

Emission Unit: FCCU Regenerator

Emission Limit: 70 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>16.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>25.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>39.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>80.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>3.66</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x **CO** CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 500 ppm

Emission Unit: FCCU Regenerator

Average Time: one hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>16.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>25.00</u> hrs
C. Process Problems	<u>1.00</u> hrs	C. QA Calibration	<u>39.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>1.00</u> hrs	2. Total Duration	<u>80.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.05</u> %	3. Percent of Total CEM Downtime	<u>3.66</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 16 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: FCCU Regenerator

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>16.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>25.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>39.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>80.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>3.66</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)
 Other: N/A

Reporting Quarter: First 2012

Monitor Model: Limas 11 (SO₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 70 ppm

Average Time: 7 day average

Emission Unit: FCCU Regenerator

Emission Limit: 35 ppm

Average Time: 365 day average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>16.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>25.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>39.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>80.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>3.66</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Lighthawk 560

Facility: Marathon Petroleum Company LLC

Manufacturer: Teledyne Monitor Labs

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 20% opacity

Emission Unit: FCCU Regenerator

Average Time: 6 minute average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>8.30</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>8.30</u> hrs	2. Total Duration	<u>3.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.38</u> %	3. Percent of Total CEM Downtime	<u>0.14</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: 2000GC

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 162 ppm

Emission Unit: West Plant Fuel Gas NSPS Heaters

Average Time: 3 hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>5.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>16.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>21.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.96</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: 2000 Vista II

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 162 ppm

Emission Unit: East Plant Fuel Gas NSPS Heaters

Average Time: 3 hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>12.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>9.00</u> hrs	C. QA Calibration	<u>9.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>9.00</u> hrs	2. Total Duration	<u>21.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.41</u> %	3. Percent of Total CEM Downtime	<u>0.96</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.2 lbs/MMBTU

Emission Unit: Zurn Boiler

Average Time: 24 hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>4.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>4.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.18</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: URAS 26 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.1 lbs/MMBTU

Emission Unit: Zurn Boiler

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>0.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>4.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>4.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>0.18</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 2 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Zurn Boiler

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>0.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>4.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>4.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>0.18</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO2 NOx CO CO2 O2 TRS H2S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: LIMAS-11-UV

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB Advance Optima

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 250 ppm

Emission Unit: Sulfur Recovery Unit Thermal Oxidizer

Average Time: 12 hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>52.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>106.00</u> hrs	C. QA Calibration	<u>16.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>106.00</u> hrs	2. Total Duration	<u>68.00</u> hrs
3. Percent of Total Excess Emissions	<u>4.85</u> %	3. Percent of Total CEM Downtime	<u>3.11</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: MAGNOS 106/206

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB Advance Optima

Emission Limit: none

Emission Unit: Sulfur Recovery Unit Thermal Oxidizer

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>52.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>106.00</u> hrs	C. QA Calibration <u>16.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>106.00</u> hrs	2. Total Duration <u>68.00</u> hrs
3. Percent of Total Excess Emissions <u>4.85</u> %	3. Percent of Total CEM Downtime <u>3.11</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 400 ppm

Emission Unit: CCR Charge Heater (CO)

Average Time: daily average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>0.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>3.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>3.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>0.14</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: none

Emission Unit: CCR Charge Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>3.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.14</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: URAS 14 (CO)

Facility: Marathon Petroleum Company LLC

Manufacturer: ABB

1300 South Fort Street

Detroit, MI 48217

Emission Limit: 400 ppm

Emission Unit: FCCU Charge Heater

Average Time: 1 hour average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>3.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.14</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: FCCU Charge Heater

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>3.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>3.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.14</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Limas 11 (NO_x)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: 0.05 lbs/MMBTU

Emission Unit: Crude/Vacuum Charge Heater

Average Time: annual rolling average

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>2.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>2.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.09</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: N/A

Reporting Quarter: First 2012

Monitor Model: Magnos 106 (O₂)

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: ABB

Emission Limit: none

Emission Unit: Crude/Vacuum Charge Heater (O₂)

Average Time: none

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary	CEM Performance Summary
1. Duration of Excess Emissions	1. Duration of CEM Downtime During Source Operation
A. Startup/Shutdown <u>0.00</u> hrs	A. Monitor Malfunction <u>0.00</u> hrs
B. Control Equipment <u>0.00</u> hrs	B. Non- Monitor Malfunction <u>0.00</u> hrs
C. Process Problems <u>0.00</u> hrs	C. QA Calibration <u>2.00</u> hrs
D. Other Known Causes <u>0.00</u> hrs	D. Other Known Causes <u>0.00</u> hrs
E. Unknown Causes <u>0.00</u> hrs	E. Unknown Causes <u>0.00</u> hrs
2. Total Duration <u>0.00</u> hrs	2. Total Duration <u>2.00</u> hrs
3. Percent of Total Excess Emissions <u>0.00</u> %	3. Percent of Total CEM Downtime <u>0.09</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC

Manufacturer: Powertrol

1300 South Fort Street

Detroit, MI 48217

Emission Limit: Pilot Light Present

Emission Unit: Vents to CP Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>0.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>0.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.00</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC

Manufacturer: Powertrol

1300 South Fort Street

Detroit, MI 48217

Emission Limit: Pilot Light Present

Emission Unit: Vents to Alkylation Unit Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>17.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>17.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.78</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC1 Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC

Manufacturer: Powertrol

1300 South Fort Street

Detroit, MI 48217

Emission Limit: Pilot Light Present

Emission Unit: Vents to Unifiner Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>1.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>1.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.05</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Excess Emission and CEM Reporting Form

Pollutant: SO₂ NO_x CO CO₂ O₂ TRS H₂S HC₁ Opacity (Circle One)

Other: Flare Pilot

Reporting Quarter: First 2012

Monitor Model: SLX-202

Facility: Marathon Petroleum Company LLC
1300 South Fort Street
Detroit, MI 48217

Manufacturer: Powertrol

Emission Limit: Pilot Light Present

Emission Unit: Vents to Crude Flare

Average Time: continuously

Total Operating Hours of Emission Unit: 2184 hrs

Emission Data Summary		CEM Performance Summary	
1. Duration of Excess Emissions		1. Duration of CEM Downtime During Source Operation	
A. Startup/Shutdown	<u>0.00</u> hrs	A. Monitor Malfunction	<u>0.00</u> hrs
B. Control Equipment	<u>0.00</u> hrs	B. Non- Monitor Malfunction	<u>0.00</u> hrs
C. Process Problems	<u>0.00</u> hrs	C. QA Calibration	<u>0.00</u> hrs
D. Other Known Causes	<u>0.00</u> hrs	D. Other Known Causes*	<u>10.00</u> hrs
E. Unknown Causes	<u>0.00</u> hrs	E. Unknown Causes	<u>0.00</u> hrs
2. Total Duration	<u>0.00</u> hrs	2. Total Duration	<u>10.00</u> hrs
3. Percent of Total Excess Emissions	<u>0.00</u> %	3. Percent of Total CEM Downtime	<u>0.46</u> %

(% Total excess emissions) = (Total duration of excess emissions) / (Total operating time) x 100%

(% CEM downtime) = (Total duration of CEM downtime) / (Total operating time) x 100%

If there were no exceedences, the required analyses were made and no CEM downtime and/or excess emissions occurred during the reporting period.

*Other Known Causes: Hours in this category are attributed to weather, including rain and snow, as well as fog from cooling tower operation interfering with the sight of the analyzer. Visual checks verified a pilot was present.

Appendix B

New Source Performance Standards (NSPS) Subpart J Alternate Monitoring Plan (AMP) Data

Complex 3 (RADAR) - B		Complex 3 (RADAR) - C		Complex 4 (AMP Sheet) - D		Complex 4 (AMP Sheet) - E	
Most Recent Sample Dates	FCCU Disulfide off-gas H2S ppm 2 x year	Most Recent Sample Dates	CP Spent Caustic Drum Vent H2S ppm 2 x year	Most Recent Sample Dates	SR Aromatics Sump Vent H2S ppm 2 x year	Most Recent Sample Dates	CCR Chlorosorb Vent SO2 ppm 2 x year
11/7/2011	0	11/9/2011	0	3/28/2012	0	3/21/2012	0
1/4/2012	0	1/4/2012	0	3/29/2012	0	3/28/2012	0

	Complex 2 (AMP Sheet) - A		Complex 4 (Lab Data)		Complex 2 (Lab Data)
	Alky Spent Caustic H2S ppm When flaring		CCR/SR Recycle H2 H2S ppm 2 x year		DBT/Unfiner Recycle H2 H2S ppm 5 x week
Date			14RHH2S.LD4		07RHH2S.LD

1/1/2012		<1	<1
1/2/2012		<1	<1
1/3/2012		<1	<1
1/4/2012		<1	<1
1/5/2012		<1	<1
1/6/2012		<1	<1
1/7/2012		<1	<1
1/8/2012		<1	<1
1/9/2012		<1	<1
1/10/2012		<1	<1
1/11/2012		<1	<1
1/12/2012		<1	<1
1/13/2012		<1	<1
1/14/2012		<1	<1
1/15/2012		<1	<1
1/16/2012		<1	<1
1/17/2012		<1	<1
1/18/2012		<1	<1
1/19/2012		<1	--
1/20/2012		<1	<1
1/21/2012		<1	<1
1/22/2012		<1	<1
1/23/2012		<1	<1
1/24/2012		<1	<1
1/25/2012		<1	<1
1/26/2012		<1	<1
1/27/2012		<1	<1
1/28/2012		<1	<1
1/29/2012		<1	<1
1/30/2012		<1	<1
1/31/2012		<1	<1
2/1/2012		<1	<1
2/2/2012		<1	<1
2/3/2012		<1	<1
2/4/2012		<1	<1
2/5/2012		<1	<1
2/6/2012		<1	<1
2/7/2012		<1	<1
2/8/2012		<1	<1
2/9/2012		<1	<1
2/10/2012		<1	<1
2/11/2012		<1	<1
2/12/2012		<1	<1
2/13/2012		<1	<1
2/14/2012		<1	<1
2/15/2012		<1	<1
2/16/2012		<1	<1
2/17/2012		<1	<1
2/18/2012		<1	<1
2/19/2012		<1	<1
2/20/2012		<1	<1
2/21/2012		--	<1
2/22/2012		<1	<1
2/23/2012		<1	<1
2/24/2012		<1	<1
2/25/2012		<1	<1
2/26/2012		<1	<1
2/27/2012		<1	<1
2/28/2012		<1	<1
2/29/2012		<1	<1
3/1/2012		<1	<1
3/2/2012		<1	<1
3/3/2012		<1	<1
3/4/2012		<1	<1
3/5/2012		<1	<1
3/6/2012		<1	<1
3/7/2012		--	<1
3/8/2012		<1	<1
3/9/2012		<1	<1
3/10/2012		<1	<1
3/11/2012		<1	<1
3/12/2012		<1	<1
3/13/2012		<1	Unit down
3/14/2012		<1	Unit down
3/15/2012		<1	Unit down
3/16/2012		<1	Unit down
3/17/2012		<1	Unit down
3/18/2012		<1	Unit down
3/19/2012		<1	Unit down
3/20/2012		<1	<1
3/21/2012		<1	<1
3/22/2012		<1	<1
3/23/2012		<1	20
3/24/2012		<1	--
3/25/2012		<1	<1
3/26/2012		<1	<1
3/27/2012		<1	<1
3/28/2012		<1	<1
3/29/2012		<1	Unit down
3/30/2012		<1	Unit down
3/31/2012		<1	Unit down

Appendix C

Cylinder Gas Audit Information

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: B&W Boiler CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (NOx), Magnos 106 (O2), Uras 14 (CO)

Constituents monitored (w/ranges): NOx (0-500), CO (0-500), O2 (0-10%)

Date CGA performed: 1/4/2012

Performed by: Eric Justa and Glen Senczyszyn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NO	low	EB0025464	02/02/13	119	ppm
76-188-232	CO	low	EB0025464	02/02/13	125	ppm
76-188-219	O2	low	EB0025711	03/29/14	5.49	%
76-188-231	NO	mid	EB0029861	07/11/13	273	ppm
76-188-231	CO	mid	EB0029861	07/11/13	274	ppm
76-188-215	O2	mid	EB003822	06/17/12	8.99	%

Low-level CGA:

Start time	End time	NO	CO	O2
9:35	9:47	116	126	5.49
9:47	9:59	116.5	126	5.49
9:59	10:11	116	126	5.49
Average		116.2	126	5.49
Cal gas value		119.0	125	5.49
CGA accuracy		2.4%	0.6%	0.0%

High-level CGA:

Start time	End time	NO	CO	O2
10:11	10:26	273	274	8.95
10:26	10:39	273	274	8.95
10:39	10:50	273	274	8.95
Average		273.0	274	8.95
Cal gas value		273.0	274	8.99
CGA accuracy		0.0%	0.1%	0.4%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: CCR Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: URAS 14 (CO) and Magnos 106 (O2)

Constituents monitored (w/ranges): CO (0-500) and O2 (0-10%)

Date CGA performed: 3/27/2012

Performed by: Glen Senczyszyn and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-166	CO	low	EB0004205	09/01/12	125	ppm
76-188-166	O2	low	EB0004205	09/01/12	4.98	%
76-188-165	CO	mid	EB0022851	09/26/14	270	ppm
76-188-165	O2	mid	EB0022851	09/26/14	9.01	%

Low-level CGA:

Start time	End time	CO	O2
9:36	9:45	123	4.96
9:45	9:54	123	4.96
9:54	10:03	123	4.96
Average		123	4.96
Cal gas value		125.0	4.98
CGA accuracy		1.6%	0.4%

Mid-level CGA:

Start time	End time	CO	O2
10:04	10:13	267	8.93
10:13	10:22	267	8.93
10:22	10:31	267	8.93
Average		267	8.93
Cal gas value		270	9.01
CGA accuracy		1.1%	0.9%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: Crude and Vacuum Heater NOx

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas11 (NOx) and Magnos 106 (O2)

Constituents monitored (w/ranges): NOx (0-100) O2 (0-10%)

Date CGA performed: 1/12/2012

Performed by: Eric Justa and Bryan Longtine

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-132	NO	low	EB0014057	01/24/13	25.1	ppm
76-188-219	O2	low	CC214344	05/11/13	5.49	%
76-188-132	NO	mid	CC319137	07/27/13	55.7	ppm
76-188-215	O2	mid	CC8457	07/28/13	9.12	%

Low-level CGA:

Start time	End time	NO	O2
9:45	9:47	25.1	5.47
9:57	9:59	25.1	5.48
10:09	10:12	25.1	5.49
Average		25.1	5.48
Cal gas value		25.1	5.49
CGA accuracy		0.00%	0.18%

Mid-level CGA:

Start time	End time	NO	O2
10:21	10:33	55.1	9.16
10:33	10:46	55.3	9.11
10:46	10:58	55.3	9.11
Average		55.2	9.13
Cal gas value		55.7	9.12
CGA accuracy		0.84%	0.07%

Cylinder Gas Audit (CGA) Datasheet

Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: East Plant Fuel Gas

Analyzer: West Plant Fuel Gas

Analyzer Manufacturer: ABB

Analyzer Manufacturer: ABB

Analyzer model #'s: 2000 VISTA II

Analyzer model #'s: 2000GC

Constituents monitored
(w/ranges): H2S (0-300)

Constituents monitored
(w/ranges): H2S (0-300)

Date CGA performed: 1/17/2012

Date CGA performed: 3/16/2012

Performed by: G. Senczyszyn and E. Justa

Performed by: B. Longtine

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
East Plant Fuel Gas						
76-188-017	H2S	low	EB0028210	02/22/12	76.6	ppm
76-188-019	H2S	mid	EB0028201	02/22/12	163	ppm
West Plant Fuel Gas						
76-188-017	H2S	low	EB0031076	06/03/12	75.3	ppm
76-188-019	H2S	mid	EB0015328	03/08/13	163	ppm

East Plant Fuel Gas

Low-level CGA:

Start time	End time	H2S
9:45	9:49	70.9
9:49	9:54	71.6
9:54	9:59	72.3
Average		71.6
Cal gas value		76.6
CGA accuracy		6.5%

West Plant Fuel Gas

Low-level CGA:

Start time	End time	H2S
12:33	12:37	73.4
12:37	12:41	72.6
12:41	12:45	72.7
Average		72.9
Cal gas value		75.3
CGA accuracy		3.2%

Mid-level CGA:

Start time	End time	H2S
10:04	10:09	159.8
10:09	10:14	160.7
10:14	10:19	160.5
Average		160.3
Cal gas value		163.0
CGA accuracy		1.6%

Mid-level CGA:

Start time	End time	H2S
12:45	12:49	152
12:49	14:53	154
14:53	16:57	155
Average		154
Cal gas value		163
CGA accuracy		5.8%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: FCC Charge Heater

Analyzer Manufacturer: ABB

Analyzer model #'s: URAS 14 (CO) and Magnos 106 (O2)

Constituents monitored (w/ranges): CO (0-500) and O2 (0-10%)

Date CGA performed: 2/8/2012

Performed by: Eric Justa and Glen Senczyszyn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-166	CO	low	CC275870	03/20/12	124	ppm
76-188-166	O2	low	CC275870	03/20/12	5.08	%
76-188-165	CO	mid	EB0028698	11/07/14	275	ppm
76-188-165	O2	mid	EB0028698	11/07/14	8.95	%

Low-level CGA:

Start time	End time	CO	O2
10:00	10:09	124	5.08
10:09	10:18	124	5.08
10:18	10:27	124	5.08
Average		124	5.08
Cal gas value		124	5.08
CGA accuracy		0.0%	0.0%

Mid-level CGA:

Start time	End time	CO	O2
10:27	10:36	275	8.95
10:36	10:46	275	8.95
10:46	10:56	275	8.95
Average		275	8.95
Cal gas value		275	8.95
CGA accuracy		0.0%	0.0%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LLC - Michigan Refining Division

Analyzer: FCCU Regenerator exhaust CEMS

Analyzer Manufacturer: ABB

Analyzer model #'s: Limas 11 (SO2/NOx), Magnos 106 (O2), Uras 14 (CO/CO2)

Constituents monitored (w/ranges): SO2 (0-200), NOx (0-200), CO (0-1000), CO2 (0-20%), O2 (0-10%)

Date CGA performed: 2/27/2012

Performed by: Bryan Longtine

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-218	SO2	low	EB0014006	11/15/12	47.7	ppm
76-188-218	NO	low			49.6	ppm
76-188-218	CO	low			247	ppm
76-188-218	CO2	low			6.53	%
76-188-219	O2	low	CC280779	07/13/14	5.48	%
76-188-213	SO2	mid	CC314664	11/1/13	108	ppm
76-188-213	NO	mid			113	ppm
76-188-213	CO	mid			541	ppm
76-188-213	CO2	mid			12.2	%
76-188-215	O2	mid	EB0003822	06/17/12	8.99	%
76-188-215	NO2	mid			94.7	ppm

Low-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
18:20	18:36	43.2	51.1	253	6.7	5.62
18:36	18:52	42	51.2	253	6.7	5.53
18:52	19:08	43.4	51.4	253	6.7	5.53
Average		43	51	253	6.70	5.56
Cal gas value		47.7	49.6	247.0	6.53	5.48
CGA accuracy		10.1%	3.3%	2.4%	2.6%	1.5%

Mid-level CGA:

Start time	End time	SO2	NO	CO	CO2	O2
19:44	19:57	108.3	112.5	536	12.18	8.98
19:57	20:10	105	112.8	536	12.17	8.99
20:10	20:23	107.6	113.1	537	12.19	8.99
Average		107	113	536	12.2	8.99
Cal gas value		108	113.0	541	12.2	8.99
CGA accuracy		1.0%	0.2%	0.9%	0.2%	0.0%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: SRU Thermal Oxidizer SO2

Analyzer Manufacturer: ABB Advance Optima

Analyzer model #'s: LIMAS-11-UV (SO2) and MAGNOS 106/206 (O2)

Constituents monitored (w/ranges): SO2 (0-500) O2 (0-10%)

Date CGA performed: 3/21/2012

Performed by: Eric Justa and Glen Senczyszyn

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	SO2	low	EB0027779	01/31/13	129.0	ppm
76-188-219	O2	low	EB0027779	01/31/13	5.50	%
76-188-231	SO2	mid	CC316237	01/31/13	279	ppm
76-188-215	O2	mid	CC316237	01/31/13	9.01	%

Low-level CGA:

Start time	End time	SO2	O2
12:26	12:35	127.3	5.41
12:35	12:44	126.6	5.39
12:44	12:53	126.7	5.39
Average		126.9	5.40
Cal gas value		129	5.5
CGA accuracy		1.7%	1.9%

Mid-level CGA:

Start time	End time	SO2	O2
12:54	13:03	273.3	8.81
13:03	13:12	273.6	8.81
13:12	13:21	273.3	8.81
Average		273.4	8.81
Cal gas value		279	9.0
CGA accuracy		2.0%	2.2%

Cylinder Gas Audit (CGA) Datasheet
Marathon Petroleum Company LP - Michigan Refining Division

Analyzer: Zurn Boiler

Analyzer Manufacturer: ABB

Analyzer Model Number's: ABB Limas 11 (NOx), ABB Uras 14 (CO), and ABB Magnos 106 (O2)

Serial Number's: 3.341196.1 (NOx), 3.341671.1 (CO), and 3.341670.1 (O2)

Constituents monitored (w/ranges): NOx (0-500), CO high range (0-500), CO low range (0-50) and O2 (0-10%)

Date CGA performed: 3/19/2012

Performed by: Glen Senczyszyn and Eric Justa

Calibration gases used:

MAP stock #	Constituent	low- or mid-	Cylinder #	Exp date	Certified concentration	Units
76-188-232	NOx	low	EB0003334	04/07/12	124	ppm
76-188-232	CO high range	low	EB0003334	04/07/12	124	ppm
76-188-259	CO low range	low	EB0033563	09/23/14	11.9	ppm
76-188-259	O2	low	EB0033563	09/23/14	5.00	%
76-188-231	NOx	mid	EB0025213	01/07/13	262	ppm
76-188-231	CO high range	mid	EB0025213	01/07/13	273	ppm
76-188-269	CO low range	mid	EB0033277	09/23/12	27.80	ppm
76-188-269	O2	mid	EB0033277	09/23/12	9.00	%

Low-level CGA:

Start time	End time	NOx	CO high range	CO low range	O2
10:18	10:30	124	124	11.8	4.96
10:30	10:42	124	124	11.8	4.95
10:42	10:54	124	124	11.8	4.95
Average		124	124	11.8	4.95
Cal gas value		124	124	11.9	5.00
CGA accuracy		0.0%	0.0%	0.8%	0.9%

Mid-level CGA:

Start time	End time	NOx	CO high range	CO low range	O2
11:08	11:21	265	275	27.5	8.95
11:21	11:33	265	275	27.5	8.95
11:33	11:45	265	275	27.5	8.95
Average		262	273	27.5	8.95
Cal gas value		262	273	27.8	9.00
CGA accuracy		0.0%	0.0%	1.1%	0.6%

Appendix D

Excess Emission Report

Excess Emission Report
First Quarter 2012
Marathon Petroleum Company LLC - Michigan Refining Division
Time Periods are Approximate

SRU Thermal Oxidizer

Start Date/Time*	End Date/Time*	Duration of Downtime (hrs)	Equipment	Emissions (ppm 12 hr ave)**	Cause	Corrective Action
1/25/12 9:00 AM	1/25/12 10:00 AM	1 hrs	SRU Thermal Oxidizer	271 hrs	At 07:40 AM on January 25, 2012, an upset occurred in the cooling water system serving the Sulfur Recovery Unit, the Sour Water Strippers, and the Tail Gas Treater Units. As a result of the cooling system upset, the Tail Gas Treater Unit #1, Tail Gas Treater Unit #2, Sulfur Recovery Unit B Train, and Sulfur Recovery Unit C Train shut down and were restarted several times. Due to all of these issues, the Sulfur Dioxide limit was exceeded at the Thermal Oxidizer.	MPC Operations immediately cut feed rate in both the Gas Oil Hydrotreater and the Diesel Hydrotreater. Maintenance worked to get the cooling water system functioning again and to bring the Sulfur Recovery Unit back to normal operations. In addition, there was immediate action to minimize emissions by reducing the refinery operating capacity.
1/25/12 10:00 AM	1/25/12 11:00 AM	1 hrs	SRU Thermal Oxidizer	327 hrs		
1/25/12 11:00 AM	1/25/12 12:00 PM	1 hrs	SRU Thermal Oxidizer	384 hrs		
1/25/12 12:00 PM	1/25/12 1:00 PM	1 hrs	SRU Thermal Oxidizer	426 hrs		
1/25/12 1:00 PM	1/25/12 2:00 PM	1 hrs	SRU Thermal Oxidizer	468 hrs		
1/25/12 2:00 PM	1/25/12 3:00 PM	1 hrs	SRU Thermal Oxidizer	470 hrs		
1/25/12 3:00 PM	1/25/12 4:00 PM	1 hrs	SRU Thermal Oxidizer	473 hrs		
1/25/12 4:00 PM	1/25/12 5:00 PM	1 hrs	SRU Thermal Oxidizer	514 hrs		
1/25/12 5:00 PM	1/25/12 6:00 PM	1 hrs	SRU Thermal Oxidizer	552 hrs		
1/25/12 6:00 PM	1/25/12 7:00 PM	1 hrs	SRU Thermal Oxidizer	590 hrs		
1/25/12 7:00 PM	1/25/12 8:00 PM	1 hrs	SRU Thermal Oxidizer	592 hrs		
1/25/12 8:00 PM	1/25/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	600 hrs		
1/25/12 9:00 PM	1/25/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	598 hrs		
1/25/12 10:00 PM	1/25/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	544 hrs		
1/25/12 11:00 PM	1/26/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	486 hrs		
1/26/12 12:00 AM	1/26/12 1:00 AM	1 hrs	SRU Thermal Oxidizer	447 hrs		
1/26/12 1:00 AM	1/26/12 2:00 AM	1 hrs	SRU Thermal Oxidizer	447 hrs		
1/26/12 2:00 AM	1/26/12 3:00 AM	1 hrs	SRU Thermal Oxidizer	408 hrs		
1/26/12 3:00 AM	1/26/12 4:00 AM	1 hrs	SRU Thermal Oxidizer	414 hrs		
1/26/12 4:00 AM	1/26/12 5:00 AM	1 hrs	SRU Thermal Oxidizer	406 hrs		
1/26/12 5:00 AM	1/26/12 6:00 AM	1 hrs	SRU Thermal Oxidizer	359 hrs		
1/26/12 6:00 AM	1/26/12 7:00 AM	1 hrs	SRU Thermal Oxidizer	316 hrs		
1/26/12 7:00 AM	1/26/12 8:00 AM	1 hrs	SRU Thermal Oxidizer	275 hrs		
1/26/12 8:00 AM	1/26/12 9:00 AM	1 hrs	SRU Thermal Oxidizer	257 hrs		
1/26/12 9:00 AM	1/25/12 10:00 AM	1 hrs	SRU Thermal Oxidizer	274 hrs		
3/12/12 6:00 PM	3/12/12 7:00 PM	1 hrs	SRU Thermal Oxidizer	290 hrs	On March 12th, 2012 while slopping the GOHT stripper overhead, the overhead receiver level went high and overflowed to the recovery suction drum. This resulted in a high level in the suction drum that lead to the GOHT compressors shutting down. The shutdown of the compressors triggered a chain reaction that caused the GOHT unit to shut down. Because the GOHT was at max rate, with acid gas production rate being high which is directed to the SRUs, the SRUs were surged which caused them to trip offline. The loss of the SRUs and the TGTUs limited the amount of acid gas that could be treated so the acid gas streams had to be routed for safety and process unit health to the SRU incinerator.	MPC Operations immediately cut feed rate in the Gas Oil Hydrotreater and worked to bring the Sulfur Recovery Unit back to normal operations. In addition, there was immediate action to minimize emissions by reducing the refinery operating capacity.
3/12/12 7:00 PM	3/12/12 8:00 PM	1 hrs	SRU Thermal Oxidizer	347 hrs		
3/12/12 8:00 PM	3/12/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	407 hrs		
3/12/12 9:00 PM	3/12/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	428 hrs		
3/12/12 10:00 PM	3/12/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	434 hrs		
3/12/12 11:00 PM	3/13/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	436 hrs		
3/13/12 12:00 AM	3/13/12 1:00 AM	1 hrs	SRU Thermal Oxidizer	440 hrs		
3/13/12 1:00 AM	3/13/12 2:00 AM	1 hrs	SRU Thermal Oxidizer	443 hrs		
3/13/12 2:00 AM	3/13/12 3:00 AM	1 hrs	SRU Thermal Oxidizer	442 hrs		
3/13/12 3:00 AM	3/13/12 4:00 AM	1 hrs	SRU Thermal Oxidizer	468 hrs		
3/13/12 4:00 AM	3/13/12 5:00 AM	1 hrs	SRU Thermal Oxidizer	449 hrs		
3/13/12 5:00 AM	3/13/12 6:00 AM	1 hrs	SRU Thermal Oxidizer	392 hrs		
3/13/12 6:00 AM	3/13/12 7:00 AM	1 hrs	SRU Thermal Oxidizer	327 hrs		
3/13/12 7:00 AM	3/13/12 8:00 AM	1 hrs	SRU Thermal Oxidizer	269 hrs		
3/14/12 8:00 PM	3/14/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	254 hrs	On March 14th, 2012 the TGTU 2 temperature dropped causing an excess of acid gas in C Train. The acid gas loading was attempted to be shifted to the other trains and away from C Train, which was taken off line. The balancing of the acid gas loading caused SO2 to go high at the incinerator.	MPC Operations immediately worked to bring the Sulfur Recovery Unit back to normal operations. In addition, there was immediate action to minimize emissions by reducing the refinery operating capacity.
3/14/12 9:00 PM	3/14/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	256 hrs		
3/14/12 10:00 PM	3/14/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	258 hrs		
3/14/12 11:00 PM	3/15/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	257 hrs		
3/15/12 12:00 AM	3/15/12 1:00 AM	1 hrs	SRU Thermal Oxidizer	256 hrs		
3/15/12 1:00 AM	3/15/12 2:00 AM	1 hrs	SRU Thermal Oxidizer	257 hrs		
3/15/12 2:00 AM	3/15/12 3:00 AM	1 hrs	SRU Thermal Oxidizer	252 hrs		

Excess Emission Report
First Quarter 2012
Marathon Petroleum Company LLC - Michigan Refining Division
Time Periods are Approximate

SRU Thermal Oxidizer

Start Date/Time*	End Date/Time*	Duration of Downtime (hrs)	Equipment	Emissions (ppm 12 hr ave)**	Cause	Corrective Action
3/16/12 3:00 PM	3/16/12 4:00 PM	1 hrs	SRU Thermal Oxidizer	270 hrs	On March 16th, 2012 the acid gas balancing in the Sulfur Recovery Unit caused the Tail Gas Heater to trip. The amine which scrubs hydrogen sulfide from the units was contaminated which reduced the efficiency of scrubbing resulting in high Sulfur Dioxide at the incinerator.	MPC Operations immediately worked to bring the Sulfur Recovery Unit back to normal operations. In addition, there was immediate action to minimize emissions by reducing the refinery operating capacity.
3/16/12 4:00 PM	3/16/12 5:00 PM	1 hrs	SRU Thermal Oxidizer	303 hrs		
3/16/12 5:00 PM	3/16/12 6:00 PM	1 hrs	SRU Thermal Oxidizer	328 hrs		
3/16/12 6:00 PM	3/16/12 7:00 PM	1 hrs	SRU Thermal Oxidizer	346 hrs		
3/16/12 7:00 PM	3/16/12 8:00 PM	1 hrs	SRU Thermal Oxidizer	373 hrs		
3/16/12 8:00 PM	3/16/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	410 hrs		
3/16/12 9:00 PM	3/16/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	449 hrs		
3/16/12 10:00 PM	3/16/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	482 hrs		
3/16/12 11:00 PM	3/17/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	518 hrs		
3/17/12 12:00 AM	3/17/12 1:00 AM	1 hrs	SRU Thermal Oxidizer	514 hrs		
3/17/12 1:00 AM	3/17/12 2:00 AM	1 hrs	SRU Thermal Oxidizer	511 hrs		
3/17/12 2:00 AM	3/17/12 3:00 AM	1 hrs	SRU Thermal Oxidizer	500 hrs		
3/17/12 3:00 AM	3/17/12 4:00 AM	1 hrs	SRU Thermal Oxidizer	473 hrs		
3/17/12 4:00 AM	3/17/12 5:00 AM	1 hrs	SRU Thermal Oxidizer	461 hrs		
3/17/12 5:00 AM	3/17/12 6:00 AM	1 hrs	SRU Thermal Oxidizer	456 hrs		
3/17/12 6:00 AM	3/17/12 7:00 AM	1 hrs	SRU Thermal Oxidizer	458 hrs		
3/17/12 7:00 AM	3/17/12 8:00 AM	1 hrs	SRU Thermal Oxidizer	448 hrs		
3/17/12 8:00 AM	3/17/12 9:00 AM	1 hrs	SRU Thermal Oxidizer	426 hrs		
3/17/12 9:00 AM	3/17/12 10:00 AM	1 hrs	SRU Thermal Oxidizer	399 hrs		
3/17/12 10:00 AM	3/17/12 11:00 AM	1 hrs	SRU Thermal Oxidizer	384 hrs		
3/17/12 11:00 AM	3/17/12 12:00 PM	1 hrs	SRU Thermal Oxidizer	364 hrs		
3/17/12 12:00 PM	3/17/12 1:00 PM	1 hrs	SRU Thermal Oxidizer	378 hrs		
3/17/12 1:00 PM	3/17/12 2:00 PM	1 hrs	SRU Thermal Oxidizer	361 hrs		
3/17/12 2:00 PM	3/17/12 3:00 PM	1 hrs	SRU Thermal Oxidizer	331 hrs		
3/17/12 3:00 PM	3/17/12 4:00 PM	1 hrs	SRU Thermal Oxidizer	314 hrs		
3/17/12 4:00 PM	3/17/12 5:00 PM	1 hrs	SRU Thermal Oxidizer	304 hrs		
3/17/12 5:00 PM	3/17/12 6:00 PM	1 hrs	SRU Thermal Oxidizer	297 hrs		
3/17/12 6:00 PM	3/17/12 7:00 PM	1 hrs	SRU Thermal Oxidizer	288 hrs		
3/17/12 7:00 PM	3/17/12 8:00 PM	1 hrs	SRU Thermal Oxidizer	281 hrs		
3/17/12 8:00 PM	3/17/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	275 hrs		
3/17/12 9:00 PM	3/17/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	273 hrs		
3/17/12 10:00 PM	3/17/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	266 hrs		
3/17/12 11:00 PM	3/18/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	262 hrs		
3/18/12 12:00 AM	3/18/12 1:00 AM	1 hrs	SRU Thermal Oxidizer	258 hrs		
3/18/12 1:00 AM	3/18/12 2:00 AM	1 hrs	SRU Thermal Oxidizer	275 hrs		
3/18/12 2:00 AM	3/18/12 3:00 AM	1 hrs	SRU Thermal Oxidizer	272 hrs		
3/18/12 3:00 AM	3/18/12 4:00 AM	1 hrs	SRU Thermal Oxidizer	266 hrs		
3/18/12 4:00 AM	3/18/12 5:00 AM	1 hrs	SRU Thermal Oxidizer	259 hrs		
3/18/12 5:00 AM	3/18/12 6:00 AM	1 hrs	SRU Thermal Oxidizer	255 hrs		
3/18/12 6:00 AM	3/18/12 7:00 AM	1 hrs	SRU Thermal Oxidizer	278 hrs		
3/18/12 7:00 AM	3/18/12 8:00 AM	1 hrs	SRU Thermal Oxidizer	297 hrs		
3/18/12 8:00 AM	3/18/12 9:00 AM	1 hrs	SRU Thermal Oxidizer	304 hrs		
3/18/12 9:00 AM	3/18/12 10:00 AM	1 hrs	SRU Thermal Oxidizer	315 hrs		
3/18/12 10:00 AM	3/18/12 11:00 AM	1 hrs	SRU Thermal Oxidizer	317 hrs		
3/18/12 11:00 AM	3/18/12 12:00 PM	1 hrs	SRU Thermal Oxidizer	312 hrs		

Excess Emission Report
First Quarter 2012
Marathon Petroleum Company LLC - Michigan Refining Division
Time Periods are Approximate

SRU Thermal Oxidizer

Start Date/Time*	End Date/Time*	Duration of Downtime (hrs)	Equipment	Emissions (ppm 12 hr ave)**	Cause	Corrective Action
3/18/12 12:00 PM	3/18/12 1:00 PM	1 hrs	SRU Thermal Oxidizer	318 hrs	On March 16th, 2012 the acid gas balancing in the Sulfur Recovery Unit caused the Tail Gas Heater to trip. The amine which scrubs hydrogen sulfide from the units was contaminated which reduced the efficiency of scrubbing resulting in high Sulfur Dioxide at the incinerator.	MPC Operations immediately worked to bring the Sulfur Recovery Unit back to normal operations. In addition, there was immediate action to minimize emissions by reducing the refinery operating capacity.
3/18/12 1:00 PM	3/18/12 2:00 PM	1 hrs	SRU Thermal Oxidizer	313 hrs		
3/18/12 2:00 PM	3/18/12 3:00 PM	1 hrs	SRU Thermal Oxidizer	327 hrs		
3/18/12 3:00 PM	3/18/12 4:00 PM	1 hrs	SRU Thermal Oxidizer	338 hrs		
3/18/12 4:00 PM	3/18/12 5:00 PM	1 hrs	SRU Thermal Oxidizer	344 hrs		
3/18/12 5:00 PM	3/18/12 6:00 PM	1 hrs	SRU Thermal Oxidizer	339 hrs		
3/18/12 6:00 PM	3/18/12 7:00 PM	1 hrs	SRU Thermal Oxidizer	308 hrs		
3/18/12 7:00 PM	3/18/12 8:00 PM	1 hrs	SRU Thermal Oxidizer	283 hrs		
3/18/12 8:00 PM	3/18/12 9:00 PM	1 hrs	SRU Thermal Oxidizer	269 hrs		
3/18/12 9:00 PM	3/18/12 10:00 PM	1 hrs	SRU Thermal Oxidizer	250 hrs		
3/18/12 10:00 PM	3/18/12 11:00 PM	1 hrs	SRU Thermal Oxidizer	257 hrs		
3/18/12 11:00 PM	3/19/12 12:00 AM	1 hrs	SRU Thermal Oxidizer	259 hrs		
3/19/12 12:00 AM	3/19/12 6:00 PM	1 hrs	SRU Thermal Oxidizer	252 hrs		
3/19/12 6:00 PM	3/20/12 3:00 PM	1 hrs	SRU Thermal Oxidizer	251 hrs		
3/20/12 3:00 PM	3/20/12 4:00 PM	1 hrs	SRU Thermal Oxidizer	254 hrs		

Total 106 hrs
Operating Hours 2184
% Excess Emissions 4.85

*The start time and end time are approximate.

**Emission limit is 250 ppm SO₂ (12 hour average)

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
AIR QUALITY DIVISION

**RENEWABLE OPERATING PERMIT
REPORT CERTIFICATION**

Authorized by 1994 P.A. 451, as amended. Failure to provide this information may result in civil and/or criminal penalties.

Reports submitted pursuant to R 336.1213 (Rule 213), subrules (3)(c) and/or (4)(c), of Michigan's Renewable Operating Permit (ROP) program must be certified by a responsible official. Additional information regarding the reports and documentation listed below must be kept on file for at least 5 years, as specified in Rule 213(3)(b)(ii), and be made available to the Department of Natural Resources and Environment, Air Quality Division upon request.

Source Name Marathon Petroleum Company LP County Wayne

Source Address 1300 South Fort Street City Detroit

AQD Source ID (SRN) A9831 ROP No. 199700013c ROP Section No. 01

Please check the appropriate box(es):

☐ **Annual Compliance Certification (Pursuant to Rule 213(4)(c))**

Reporting period (provide inclusive dates): From _____ To _____

- ☐ 1. During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the ROP.
- ☐ 2. During the entire reporting period this source was in compliance with all terms and conditions contained in the ROP, each term and condition of which is identified and included by this reference, **EXCEPT** for the deviations identified on the enclosed deviation report(s). The method used to determine compliance for each term and condition is the method specified in the ROP, unless otherwise indicated and described on the enclosed deviation report(s).

☐ **Semi-Annual (or More Frequent) Report Certification (Pursuant to Rule 213(3)(c))**

Reporting period (provide inclusive dates): From _____ To _____

- ☐ 1. During the entire reporting period, **ALL** monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred.
- ☐ 2. During the entire reporting period, all monitoring and associated recordkeeping requirements in the ROP were met and no deviations from these requirements or any other terms or conditions occurred, **EXCEPT** for the deviations identified on the enclosed deviation report(s).

☒ **Other Report Certification**

Reporting period (provide inclusive dates): From 1/1/2012 To 3/31/2012

Additional monitoring reports or other applicable documents required by the ROP are attached as described:

1st Quarter 2012 Continuous Emission Monitoring (CEMS) Downtime and Excess Emission

Report.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in this report and the supporting enclosures are true, accurate and complete

MPC Investment LLC,
its General Partner
Deputy Assistant Secretary

C.T. Case

Name of Responsible Official (print or type)

Title

313-843-9100

Phone Number

Signature of Responsible Official

Date